AQUATICS

Special Olympics Coaching Quick Start Guide

Special Olympics

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Training Session Safety Guidelines

Coaches are a major part of aquatics programs. They need to be well-informed and trained in all facility procedures, such as following emergency action plans, completing and filing accident reports and complying with follow-up procedures to an incident that may have occurred while they were in charge.

Electrical Safety

Electrical shock is a very real hazard in the operation of swimming pools. Permanent or temporary electrical connections and wires used with the following equipment may come in contact with water, including:

1. Underwater lights
2. Tape recorders
3. Record players
4. Automatic timing devices
5. Place clocks
6. Electronic loud speakers
7. Start systems
8. Pool vacuum cleaners
9. Many other types of electrical devices operating on line voltages in the vicinity of the racing course involve wires stretched across the pool deck. These devices are connected to the power supply.

In case of electrical shock or electrocution, call emergency personnel, and follow the facility's emergency action plan. Shut off the power source and immediately check the swimmer's airway, breathing and circulation. Use nonconductive equipment to remove the swimmer from the source of electricity if the power cannot be turned off.

Assists and Rescues

Swimmers may be in danger of drowning from a head injury, heart attack, stroke, fainting, overexertion, seizure or incapacitating cramps as well as other causes.

How the Coach Can Assist

Teach swimmers that if they feel panicky, they should try to reach the lane lines and use the lines for support. You can use the reaching, throwing or wading methods described below to assist a swimmer in a water emergency. In most cases, at least one of these measures will be successful. While you attempt to make an assist, someone in your group must be prepared to call emergency personnel immediately, if necessary, to attend to the rescued swimmer.

Drowning Situations

In this situation, a swimmer is unable to call for help or to wave his/her arms. A distress situation may become a drowning situation when the swimmer, for whatever reason, is no longer able to keep afloat. Drowning situations may be classified as passive or active.

Passive

In a passive drowning situation, the athlete may be conscious or unconscious. The swimmer might suddenly slip under water, making no attempt to call for help, and may float facedown near the surface of the water. A passive drowning situation can result from any of the following causes:

- A heart attack or stroke
- An accidental blow to the head from another swimmer or an object, such as a kickboard
- Hyperventilation and blackout
- Cold water shock after sudden submersion in cold water. The athlete may feel a strong urge to gasp. Gasping could cause the swimmer to take in water which, in turn, might cause panic and eventual suffocation.

Active

In contrast to a passive drowning situation, the athlete in an active drowning situation is conscious. Actions may be violent or weak, depending on the amount of energy the athlete possesses. An active drowning athlete's buoyancy will alternate between neutral and negative. The athlete's arms may be extended outward from his/her sides, thrashing up and down in the water, not allowing forward progress. Instead, the athlete will alternately raise and lower him/herself in the water.

Buoyancy may be lost each time the athlete goes beneath the surface. The athlete becomes less able to take in air and has to work harder to stay on the surface. Panic will begin to set in during the process, and the athlete will be unable to call for help because of concentrating all his/her efforts on breathing. Swimmers must be supported so they can breathe freely after initial contact and during the carry to safety. In distress or drowning situations, the coach must use safe and effective forms of rescue.

Do Not Endanger Yourself

Remember, the only way you can help a swimmer in trouble is when you are in a safe position yourself and you can maintain control of the situation. The reaching, throwing and wading methods presented in this section will help keep you safe and in control. Swimming out to bring a distressed swimmer to safety requires special training. If a coach who has not had safety training approaches a distressed swimmer, he/she will be risking two lives. Leaping into the water to help someone may seem courageous, but choosing one of the following methods described here—reach assist, throwing assist, ring buoy, free floating support and wading assist- is much more likely to result in a successful assist.

Reach Assists

Reach with a pole, a kickboard or other object. Firmly brace yourself on the pool deck and reach out to the athlete with any object that will lengthen your reach, such as a pole, kickboard, rescue tube, shirt, belt or towel. When the athlete is able to grasp the extended object, slowly and carefully pull the athlete to safety.

Reach with your arm or leg. In the water, use one hand to get a firm grasp on the pool ladder, overflow trough or other secure object; then extend your free hand or one of your legs to the athlete. Maintain your grasp at the water's edge. Do not swim out into the water.

Throwing Assists

You can throw a ring buoy, throw bag, rescue tube or other device for the athlete to grab and be pulled to safety. Follow these steps:

1. Get into a position that is safe and allows you to maintain your balance. Bend your knees. Step on the non-throwing end of the rope.
2. Aim your throw so that the device will fall just beyond the athlete and within reach.
3. When the athlete has grasped the device, talk reassuringly while slowly pulling the athlete to safety, leaning your body weight away from the athlete as you pull.

Ring Buoy

The ring buoy is made of buoyant cork, kapok or foam rubber. The buoy should have 20-25 meters of lightweight line with a lemon or other object at the end. This will float the line if it falls in the water and prevent the line from slipping out from under your foot when you throw the ring buoy. The buoy and coiled line is hung in an easily accessible location so that anyone can quickly grasp it.

Free Floating Support

A rescue buoy, kickboard, rescue tube and ring buoy are examples of equipment that can used as free-floating supports. To use a free-floating support, push it to the athlete and encourage him/her to grasp the support and kick toward safety.

Wading Assists

If the water is shallow (not above waist deep), you can wade in with an emergency device or buoyant object and extend it to the athlete. For this kind of assist, use a rescue tube, ring buoy, kickboard or pull buoy.

You can use the equipment for support in the water, and the athlete can grasp the other side of it. You can then pull the athlete to safety, or you can let go of the piece of equipment and tell the athlete to start kicking toward safety.

Always keep the piece of equipment between you and the athlete. If the athlete should panic and grab you, you could be in danger too.

Tips for Conducting Safe Training Sessions

1. If at an outdoor pool, have a plan to evacuate athletes if there is danger of lightening.
2. Always rope off the swimming areas so that athletes do not obstruct other swimmers.
3. Make sure athletes bring water to every practice, especially in hotter climates.
4. Check your first-aid kit; restock supplies as necessary.
5. Identify the nearest phone that is accessible during practice.
6. Ensure that the locker rooms and/or restrooms are available and clean during practice.
7. Train all athletes and coaches on emergency procedures.
8. Do not allow athletes to swim while wearing watches, bracelets or jewelry, including earrings.
9. At the beginning of each practice, provide proper stretching exercises after warming up.
10. Provide activities that also improve general fitness levels. Fit athletes are less likely to get injured.

Pool Preparation

Before swimming, it is critical to make sure the area is safe and clear of objects. Swimming aids and all other pool equipment should be in a designated place. No equipment or articles should be left lying on the deck area.

Many Special Olympics athletes train in a public pool, so it is important that swimmers are aware of the designated areas /lanes allocated to them for training purposes.

Although most Special Olympics athletes do not require special facilities for swimming, some modifications and adaptations may be necessary for safety reasons. Following are necessary factors to consider when planning a swimming training session.

- Architectural barriers within and around the pool
- Entrances
- Doorways
- Restrooms and showers
- Locker or change rooms
- Pool decks and bottom
- Water depth and condition
- Water and air temperature
- Ladder, steps, stairs and ramps
- Lighting
- Review emergency plan, and determine the specific signals that are used in identifying an emergency within the facility
- Check for slippery deck conditions and remove standing water
- Ensure there are certified lifeguards with no other duty but to guard
- Check wheelchair access
- If in a public pool, designate an adult/volunteer to act as a spotter for the group. Life guards may not be specifically watching your group/squad all the time

- Check location of safety equipment for emergency use around the pool area
- Be aware of other users within the complex

Always be ready to make adaptations and modifications in both your program and facility if necessary. Remember, it is always better to adapt the program to the facility than not to offer any swimming instruction and training at all.

Daily Performance Record

The Daily Performance Record is designed to keep an accurate record of the athletes' daily performances as they learn a sports skill. There are several reasons why the coach can benefit from using the Daily Performance Record.

1. The record becomes a permanent documentation of the athlete's progress.
2. The record helps the coach establish measurable consistency in the athlete's training program.
3. The record allows the coach to be flexible during the actual teaching and coaching session, because he can break down the skills into specific, smaller tasks that meet the individual needs of each athlete.
4. The record helps the coach choose proper skill teaching methods, correct conditions and criteria for evaluating the athlete's performance of the skills.

Using the Daily Performance Record

At the top of the record, the coach enters his/her name, the athlete's name and aquatics event. If more than one coach works with an athlete, they should enter the dates that they work with the athlete next to their names.

Before the training session begins, the coach decides what skills will be covered. The coach makes this decision based on the athlete's age, interests and his/her mental and physical abilities. The skill needs to be a statement or a description of the specific exercise that the athlete must perform. The coach enters the skill on the top line of the left-hand column. Each subsequent skill is entered after the athlete masters the previous skill. Of course, more than one sheet may be used to record all of the skills involved. Also, if the athlete cannot perform a prescribed skill, the coach may break down the skill into smaller tasks that will allow for the athlete's success at the new skill.

Conditions and Criteria for Mastering Skills

After the coach enters the skill, he/she must then decide on the conditions and criteria by which the athlete must master the skill. Conditions are special circumstances that define the manner in which the athlete must perform a skill. For example, "given a demonstration, and with assistance." The coach needs to always operate under the assumption that the ultimate conditions in which the athlete masters a skill are, "upon command and without assistance," and, therefore, does not have to enter these conditions in the record next to the skill entry. Ideally, the coach needs to arrange the skills and conditions such that the athlete gradually learns to perform the skill while upon command and without assistance.

Criteria are the standards that determine how well the skill must be performed. The coach needs to determine a standard that realistically suits the athlete's mental and physical abilities. For example, "perform a distance of 30 centimeters, 60 percent of the time." Given the varied nature of skills, the criteria might involve many different types of standards, such as amount of time, number of repetitions, accuracy, distance or speed.

Dates of Sessions and Levels of Instruction Used

The coach may work on one task for a couple of days and may use several methods of instruction during that time to progress to the point where the athlete performs the task upon command and without assistance. To establish a consistent curriculum for the athlete, the coach must record the dates he/she works on particular tasks and must enter the methods of instruction that were used on those dates.

Event: Insert Event Name

Athlete's Name Insert Name

Skill: Insert Skill

Coach's Name Insert Name

Skill Analysis	Conditions & Criteria	Dates & Instruction Methods	Date Mastered

Aquatics Attire

Appropriate aquatics attire is required for all competitors. As a coach, discuss the types of sport clothes that are acceptable and not acceptable for training and competition. Discuss the importance of wearing properly fitted clothing, along with the advantages and disadvantages of wearing certain types of clothing during training and competitions. For example, long pants and shirts are not proper aquatics attire for any event. Explain that swimmers cannot perform their best while wearing long pants or shirts that restrict their movement.

Take athletes to high school or collegiate meets and point out the attire being worn. You can even set the example, by wearing appropriate attire to training and competitions and not rewarding athletes that come improperly dressed to train and/or compete.

Clothing must be suited to the activities involved. Few sports require less equipment than swimming. Although equipment such as goggles and caps are recommended, a Special Olympics athlete only needs a swimsuit to participate.

Swimsuits

The swimsuit can be anything that closely resembles skin in fit and feel. For males, any brief swim suit made of smooth, quick-drying fabric, such as nylon or lycra, is fine. Gym shorts with waistbands that fit snugly around the waist can be substituted.

A one-piece suit is recommended for females. The suit needs to be close-fitting, and cut so as not to hinder movements. The swimsuit needs to be substantial enough to stay on the athlete's body while they train.

Racing suits, whether for men or women, will provide less drag and provide more efficiency in the water.

Cap

A tight-fitting, stretch swimmer's cap is recommended. Swim caps will prevent the hair from falling in the swimmer's face and thus provide less of a distraction. Besides keeping the swimmer's hair dry, the cap also reduces water drag and resistance.

Goggles

Swim goggles are encouraged. Goggles allow the swimmers to comfortably put their faces in the water, thus allowing for better body position and more efficiency. There must be careful adherence to safety with the use of this equipment. There are several varieties of goggles that allow for choices, depending on each swimmer's face.

Nose Clips

Nose clips are helpful for athletes who have difficulty controlling their breathing or who have sinus problems. Such clips should be used only when necessary.

Coaching Tips

- ❑ Always check with the lifeguard on duty.
- ❑ Take a head count of your swimmers and record their attendance. Give numbers to the lifeguard.
- ❑ Make lifeguard aware of any potential emergencies which may arise due to medical or behavioral conditions of swimmers.
- ❑ Designate a "spotter" for the group; this could be a parent/volunteer.
- ❑ Show swimmers the area in which they have been allocated.
- ❑ Set rules before any session commences. Ensure swimmers know their boundaries.
- ❑ If in an outdoor pool, check air and wind conditions as well as water temperature.
- ❑ Ensure that swimmers have been made aware of specific signals or cues to be used in an emergency.
- ❑ Show swimmers correct point of entry and type of entry required into the water.
- ❑ Prepare your session 15 minutes before start time. Have all necessary equipment placed in an appropriate and safe position on pool deck.

General Swimming Equipment List At-A-Glance

Chamois	Can be used in conjunction with a towel.
Fins	Used primarily in helping to develop and maintain good stroke technique, especially in drill work. Can be used in a fun activity within your training session.
Flags	Located five meters from end of pool. Used especially when swimming backstroke; indicates to swimmer in backstroke the distance from end of pool for turn or finish. Can be used during training sessions in pool.
Goggles	Encourage swimmers to wear goggles at all times while participating in training and competition. Goggles help beginners to put face in water and encourage confidence. Be aware that some swimmers may have prescription goggles, and swimmers should learn how to maintain and care for them.
Kickboards	Used during training sessions.
Nose Clips	Used by some swimmers who take in water through their nostrils, especially when performing turns.
Pace Clock	Used by swimmers to check their rest and go times during training. Can be used by coach when no stop watch is available. Swimmers need to be taught the use of a pace clock.
Pull Buoys	Can be used during a training session to help maintain buoyancy and in specific drills to develop upper body movement and strength.
Stop Watches	Used by the coach to check swimmers' times during time trials. They can also be used if no pace clock is available.
Swim Caps	Encourage swimmers to wear caps. However, they are not always necessary. Swimmers at competition level may be required to wear a cap; therefore, it is a good idea to have the swimmer adjust to wearing one. Also helps keep hair out of face and decreases drag.
Towels	Swimmers are encouraged to have a clean towel with them at training sessions.

General Coaching Points

There are differences of opinion on the use of floatation devices. Coaches must make their own decisions. However, if floatation devices are used, consider not using them for an equal amount of time as a means of developing a swimmer's own buoyancy and orientation in water. Eventually the swimmer may not require a floatation device.

Aids and equipment may need to be modified in order to adapt to physical differences. However, the individual should not become reliant on them.

Coaches need to be conversant with the rules of competition for the particular disability group of each swimmer in their care. For example, FINA (La Fédération Internationale de Natation) has particular rules for specific disability classifications that may meet the needs of a particular swimmer or swimmers at a multi-disability event. After classification, a card is provided that lists any exceptions for that swimmer. This must be produced prior to the commencement of any applicable event. Further details should be sought from your own national swimming body.

Modifications & Adaptations

Orthopedic Impairments

- Use a pool lift or a ramp to help athletes.
- Have athletes wear a flotation waist belt.
- Use the shallow end of the pool.
- Use properly trained lifeguards or assistant coaches.
- Shorten length of practice time.
- Do warm-up exercises in very shallow water.
- Ask a physical therapist to act as an advisor.

Essential Components of Planning an Aquatics Training Session

Each training session needs to contain the same essential elements. The amount of time spent on each element will depend on the goal of the training session, the time of season the session is in and the amount of time available for a particular session. The following elements need to be included in an athlete's daily training program. For more in-depth information and guidance on these elements, refer to the Aquatics Coaching Guide CD.

The Warm-Up	25-30 minutes
Specific Event Workout	15-20 minutes
Conditioning or Fitness Workout	15-20 minutes
The Cool-Down	15-20 minutes

The final step in planning a training session is choosing what the athlete is actually going to do. Remember, when creating a training session that includes the essential components, the progression allows for a gradual buildup of physical activity.

- Easy to difficult
- Slow to fast
- Known to unknown
- General to specific
- Start to finish

In organizing the team for effective teaching and learning experiences, the coach should always arrange the session so that:

- The safety of the athlete is ensured.
- Everyone can hear the instructions.
- Everyone can see the demonstration.
- Everyone will have an opportunity for maximum practice.
- Everyone will have an opportunity to be checked regularly for skill improvement.

The most important factor is to provide for the safety of the athlete. Every effort must be made to prevent an accident from occurring. A certified lifeguard must be on duty during all aquatics activities. Rules, such as no running, no dunking, no horseplay and no diving into shallow water, must be explained and enforced. Potential hazards should be pointed out. All athletes must be accounted for at the start of a period, at regular intervals during the period and at the close of the training. Coaches should remain in the pool area until the end of training and all swimmers are accounted for and have left the area. A lifeguard must be in a position to observe the safety of the swimmers at all times. The coach needs to be aware of any special medical conditions, such as seizures.

The procedures used for learning and practicing skills in the water are determined by the skill to be learned, the skill level of the swimmers, the size and shape of the facility, the extent of shallow and deep water areas available for practice, and the number, sizes and ages of the athletes. Following are factors to ensure successful learning, regardless of the type of teaching approach implemented.

1. Athletes, if at all possible, need to face away from the sun, bright light from windows or distracting influences during demonstrations.
2. Athletes must be able to see and hear the instructions during demonstrations and practice sessions.
3. Athletes must have the opportunity to:
   - make the physical and mental adjustment to the water in relation to the skill to be learned;
   - find and maintain a good working position in the water as determined by the skill to learned; and,
   - have maximum practice for accuracy, coordination, speed and expenditure of energy. This practice must include an analysis of each athlete's movements and appropriate and timely suggestions for improvement by the coach, an assistant coach or a buddy.
4. Swimmers must have ample space to practice without interference by other athletes.

Hints for Organizing a Good Training Session

1. Use the pool to your best advantage.
2. Organize stations by ability. Color code ability groups (i.e. Green-Beginner; Blue-Rookie, etc.). No one should be standing around while you arrange things. Keep everyone busy.
3. Keep athletes informed of changes in schedule or activities.
4. Introduce athletes to one another, and orient them to the instructional setting.
5. Demonstrate the sports skill as frequently as possible.
6. Keep the "fun" in fundamentals. Use a game approach.
7. Devote a part of each training session to group activity.
8. If an activity is going well, it is often useful to stop the activity while interest is high.
9. If a swimmer joins the team after training has begun, skill assessment should be done in shallow water.

Principles of Effective Training Sessions

Keep athlete's attention	Athlete needs to be an active listener.
Create clear, concise goals	Learning improves when athletes know what is expected of them.
Give clear, concise instructions	Demonstrate – increase accuracy of instruction.
Record progress	You and your athletes chart progress together.
Give positive feedback	Emphasize and reward things the athlete is doing well.
Provide variety	Vary exercises – prevent boredom.
Encourage enjoyment	Training and competition is fun; help keep it this way for you and your athletes.
Create progressions	Learning is increased when information progresses from: • Known to unknown – discovering new things successfully • Simple to complex – seeing that "I" can do it • General to specific – this is why "I" am working so hard
Plan maximum use of resources	Use what you have, and improvise for equipment that you do not have – think creatively.
Allow for individual differences	Different athletes, different learning rates, different capacities.

The Warm-Up

A warm-up period is the first part of every training session or preparation for competition. The warm-up starts slowly and systematically and gradually involves all muscles and body parts that prepare the athlete for training and competition. In addition to preparing the athlete mentally, warming up also has several physiological benefits.

- Raises body temperature
- Increases metabolic rate
- Increases heart and respiratory rate
- Prepares the muscles and nervous system for exercise

The warm-up is tailored for the activity to follow. Warm-ups consist of active motion leading up to more vigorous motion to elevate heart, respiratory and metabolic rates. The total warm-up period takes at least 25 minutes and immediately precedes the training or competition. A warm-up period will include the following basic sequence and components.

Activity	Purpose	Time (minimum)
Slow aerobic movement	Heat muscles	5 minutes
Stretching	Increase range of movement	5-10 minutes
Event-Specific Drills	Coordination preparation for training/competition	10 minutes

Slow Aerobic Movement

Jogging, non-specific movements (such as “shaking all over”) or other slow aerobic movements may be used that are specific to the ability levels of the swimmers. It is the first exercise of an athlete’s routine. Athletes begin warming the muscles by moving around for three to five minutes. This circulates the blood through all the muscles, thus providing them greater flexibility for stretching. The movement should start out slowly and then gradually increase in speed to its completion; however, the athlete should never reach even 50 percent of his maximum effort by the end of the activity. Remember, the primary objective of this phase of the warm-up is circulating the blood. The example programs for each group: beginner, stroke correction and squad—identify specific activities that may be suitable for this section of the warm-up.

Stretching

Stretching is one of the most critical parts of the warm-up and an athlete’s performance. A more flexible muscle is a stronger and healthier muscle. A stronger and healthier muscle responds better to exercise and activities and helps prevent athlete injury. Please refer to “Stretching” within this section for more in-depth information.

Flexibility is a major element to an athlete’s optimal performance in both training and competing. Flexibility is achieved through stretching, a critical component in warming up. Stretching follows an easy aerobic jog at the start of a training session or competition.

Begin with an easy stretch to the point of tension, and hold this position for 15-30 seconds until the pull lessens. When the tension eases, slowly move further into the stretch (developmental stretching) until tension is again felt. Hold this new position for an additional 15 seconds. Each stretch should be repeated four to five times on each side of the body.

It is also important to continue to breathe while stretching. As you lean into the stretch, exhale. Once the stretching point is reached, keep inhaling and exhaling while holding the stretch. Stretching should be a part of everyone’s daily life. Regular, consistent, daily stretching has been demonstrated to have the following effects.

1. Increases the length of the muscle-tendon unit
2. Increases joint range of motion
3. Reduces muscle tension
4. Develops body awareness
5. Promotes increased circulation
6. Makes you feel good

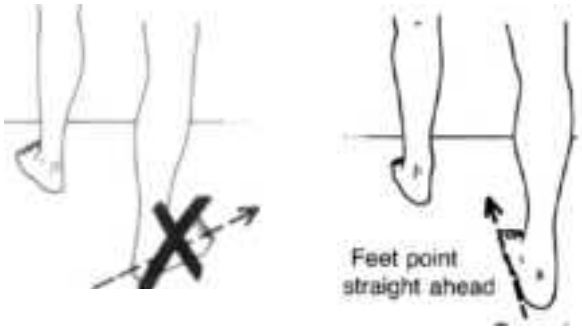
Some athletes, like those with Down syndrome, may have low muscle tone that makes them appear more flexible. Be careful to not allow these athletes to stretch beyond a normal, safe range. Several stretches are dangerous to perform for all athletes and should never be part of a safe stretching program. These unsafe stretches include the following

- Neck Backward Bending
- Trunk Backward Bending
- Spinal Roll

Stretching

Stretching is effective only if the stretch is performed accurately. Athletes need to focus on correct body positioning and alignment. Take the calf stretch for example. Many athletes do not keep their feet forward in the direction they are running.

Incorrect **Correct**



Another common fault in stretching that athletes make is bending the back in an attempt to get a better stretch from the hips. An example is a simple sitting forward leg stretch.

Incorrect **Correct**

The Cool-Down

The cool-down is as important as the warm-up. It is especially important for the higher-level stroke correction group and all squad groups. Games and activities may replace the more traditional cool-down routines, so long as they achieve the required effect. Abruptly stopping an activity may cause pooling of the blood and slow the removal of waste products in the athlete's body. It may also cause cramps, soreness and other problems for athletes. The cool-down gradually reduces the body temperature and heart rate and speeds the recovery process before the next training session or competitive experience. The cool-down is also a good time for the coach and athlete to talk about the session or competition.

Activity	Purpose	Time (minimum)
Slow aerobic swim or activity	Lowers body temperature Gradually reduces heart rate	5 minutes
Light stretching	Removes waste from muscles	5 minutes

Home Training Program

1. If athletes only train once a week with their coaches and do no training on their own, progress will be very limited. Training kits can be purchased for most sports that include most of the equipment you would need to practice at home.
2. The aquatics athlete can practice certain aquatics skills and be encouraged to do land-based exercises while out of the pool.
3. Resistance Stretch Cords can be used to simulate certain swimming actions while out of the pool. This training tool is inexpensive and easy to learn to use. Under supervision, the athlete will be able to simulate strokes and build strength at the same time.
4. Land-based exercises and stretching may involve running, gym work, light weight work and certain isometric exercises.

Skill Progression - Learn to Swim

Your Athlete Can:	Never	Sometimes	Often
Sit on pool edge	☐	☐	☐
Sit on pool edge and kick	☐	☐	☐
Enter water with assistance	☐	☐	☐
Enter water independently	☐	☐	☐
Blow into water	☐	☐	☐
Demonstrate continuous breathing and exhalation pattern	☐	☐	☐
Stand in water with assistance	☐	☐	☐
Stand in water independently	☐	☐	☐
Put face in the water	☐	☐	☐
Walk across pool in shallow water (waist deep) with assistance	☐	☐	☐
Walk across pool independently	☐	☐	☐
Jump in shallow water independently	☐	☐	☐
Exit water with assistance	☐	☐	☐
Exit water independently	☐	☐	☐
Supported, feet off bottom, move forward and backward	☐	☐	☐
Submerge in chest-deep water with assistance	☐	☐	☐
Submerge in chest-deep water independently	☐	☐	☐
Open eyes under water with or without goggles	☐	☐	☐
Touch pool bottom in chest-deep water	☐	☐	☐
Sit on pool bottom in chest-deep water	☐	☐	☐
Float on front with assistance (prone float)	☐	☐	☐
Float on front independently (prone float)	☐	☐	☐
Recover from front float with assistance	☐	☐	☐
Recover from front float independently	☐	☐	☐
Perform front float and recover to standing position	☐	☐	☐
Perform front float with a flutter kick	☐	☐	☐
Recover from front float to back float with assistance	☐	☐	☐
Recover from front float to back float independently	☐	☐	☐
Move from back float to front and return with assistance	☐	☐	☐
Move from back float to front and return independently	☐	☐	☐

Push and glide on front/back with assistance	☐	☐	☐
Push and glide on front/back independently	☐	☐	☐
Scull using small or full arm movements	☐	☐	☐
Kick while holding onto pool side/gutter	☐	☐	☐
Move forward using kickboard and flutter kick on back with assistance	☐	☐	☐
Move forward using back flutter kick independently	☐	☐	☐
Mushroom float	☐	☐	☐
From back float, mushroom float and recover	☐	☐	☐
Totals			

Coaches Tips for Water Familiarization – At-A-Glance

Tips for Practice

1. If a new swimmer is anxious, sit quietly beside the pool and distract him/her, talking about or looking at other things.
2. Make the pool environment look interesting – add floating and sinking objects.
3. Use a small blocked-off area rather than a large, open pool space.
4. Activities initially include feeling the water, walking or crawling down swim ramp, moving in shallow water, walking in water and progressing through all of the initial stages until buoyancy and submersion have been conquered.
5. Practice walking in water, blowing "eggs" or ping-pong balls across surface of water – progress to races against other swimmers.
    1. Train in thigh- to waist-deep water with a peer group of competitors.

Tips for Competition

1. Assisted walk can be a successful activity for the swimmer who has just reached this stage.
2. Teach to hold wall at start and start on signal.
3. Train in completing distance and reaching for the finish point.
4. Reward all swimmers as soon as they reach the finish point, to develop a sense of accomplishment.

12-Week Beginners Program - Sample

Week 1	Get to know pool, staff, athletes, family and caregivers Water familiarization, entries, exits, pool rules, etiquette
Week 2	Reinforce week 1 Begin skills assessments Introduce breathing
Week 3	Finalize skills assessments - goal setting for each individual for the season Hum, mobility, control of rotation, floats and tumbles
Week 4	Review previous sessions' skills Begin to identify and develop individual programs Introduce arm actions, continue with breathing and floats
Week 5	Review previous sessions Work on weak points – reinforcement through games and activities Introduce team and group activities – relays
Week 6	Work on identified issues from previous week – work on weak spots Review individual goals – adjust as required
Week 7	Conduct skills assessments Work on skills identified Review and progress on previous session's work.
Week 8	Introduce new skills – back float, push and glide, kick as ready Continue team work and relays
Week 9	Introduce competition events as identified for each group Practice in a noncompetitive games environment
Week 10	Introduce race aspect of events Practice good sportsmanship – use relays and cheer on buddies
Week 11	Conduct final skills assessment for season Practice full skills progression – end with events, fun games
Week 12	Fun competition gala with awards Certificates of Achievement for the season

The Strokes

One of the fundamental goals of any swimming program is to provide an opportunity for all swimmers to develop good swimming technique in all four strokes: freestyle, backstroke, breaststroke and butterfly. Special Olympics aquatics coaches need to have a good knowledge of the basic principles required to master these strokes. These principles are developed through a variety of progressive practices within this coaching guide.

Throughout this section we will look at the body position, leg action, arm action and breathing aspects of the four strokes. We will also look at teaching the stroke and give teaching points and practices. This exercise is not exhaustive. Experienced coaches may have further teaching points and practices that can be incorporated in the development of the athlete's swimming program.

In addition, we will generally move the teaching progression from land drills to pool drills and activities in shallow to chest-deep water. A distance is sometimes added to the activity which often includes the complete stroke – arm stroke with the respective kick.

Skill Progression - Freestyle

Your Athlete Can:	Never	Sometimes	Often
Make an attempt to swim on front	☐	☐	☐
Perform freestyle using flutter kick for 15 meters	☐	☐	☐
Perform freestyle with rhythmic breathing for one pool length	☐	☐	☐
Make an attempt to start, from in the pool	☐	☐	☐
Perform proper start, standing on the pool edge	☐	☐	☐
Perform proper start, using a starting block	☐	☐	☐
Make an attempt to turn around without stopping	☐	☐	☐
Perform an open turn after swimming freestyle without stopping	☐	☐	☐
Perform a flip turn in waist-deep water	☐	☐	☐
Perform flip turns after swimming one to two pool lengths	☐	☐	☐
Totals			

Freestyle/Front Crawl

Freestyle is regarded as the fastest of all competitive swim strokes and one of the first taught to the beginning swimmer. The stroke action involves the arms moving forward alternately with the legs kicking continuously throughout the stroke. The swimmer's body remains horizontal and streamlined in the water with the swimmer's head turned to one side to breathe after each full arm cycle. The teaching and development of the stroke can be achieved by breaking down the skill into its various components.

Body Position

The body position is almost flat. The constant propulsion from the alternating arm and leg actions make it a very effective and efficient stroke.

Key Points

- Flat with a slight slope down to hips. The waterline is between the eyebrows and hairline.
- Eyes look forward and slightly downward.
- The slight slope down to the hips enables the kick to stay in the water.
- Shoulders roll into the stroke, utilizing the strong chest muscles and generating a strong propulsive force.
- Slight head adjustments change the position of the legs. If the head is held high out of the water, the legs will drop, and, if submerged, the legs will rise out of the water.
- The legs work almost within the body depth. This creates the least resistance to forward motion.

Leg Action

The freestyle/front-crawl leg action helps the body stay in the horizontal position and balances the arm action. It may also contribute to the propulsion within the stroke.

Key Points

- Leg action starts at the hips.
- Alternating action is required.
- There is a slight bend in the knees.
- Feet kick up to the surface and churn the water without splashing.
- Ankles are relaxed to allow toes to point and give a natural in-toeing effect.
- The number of leg kicks may vary for each arm cycle.

Arm Action

The continuous, alternating arm action is the strength within the stroke and enables constant propulsion. Throughout the full stroke there are five main areas that require attention: entry, down sweep, in sweep, up sweep and recovery.

Key Points - Entry

- Hand is turned with the palm facing half outward for a thumb-first entry.
- Hand enters between the head and shoulder line with a slight bend in the arm.
- Hand then reaches forward under the surface. Note: this is a natural stretch, not overreaching.

Key Points - Down Sweep

- Hand sweeps downward and slightly outward to the catch position.
- Hand continues this sweep downward and outward.
- Elbow starts to bend. It is important that the elbow is kept high.

Key Points - In Sweep

- Hand pitch changes and curves inward toward the body's center line. This is similar to a sculling action.
- Elbow has a 90-degree bend.
- Hand accelerates.

Key Points - Up Sweep

- When the hand has reached the body's center line, the hand changes pitch to upward, outward and backward.
- This enables acceleration through to the hips.
- Hand then exits the water little-finger first.

Key Points - Recovery

- This movement is relaxed and uses the momentum from the up sweep.
- Elbow will exit first and is kept higher than the hand.
- Hand passes as close to body as possible. This is dependent on the swimmer's flexibility.
- Once the hand passes shoulder level, the arm will reach forward to the entry position.

Key Points - Breathing

- Head is turned smoothly in time with the natural roll of the body.
- Head is turned, not lifted.
- The in-breath is taken when the breathing arm is completing the up sweep.

- The non-breathing arm enters the water when the breath is taken.
- Head is turned back to the center in a smooth action as soon as the breath is taken.
- The breath is released gradually or held until just before the next in-breath.
- Breathing occurs every two arm pulls (one stroke cycle). This is unilateral breathing. It may also be taken after every three arm pulls (1.5 stroke cycles). This is bilateral breathing.

Key Points - Timing

Usually there are six leg kicks in one arm cycle. This may vary between swimmers. Swimmers who prefer middle- and long-distance swims tend to kick less frequently.

Freestyle - Faults & Fixes Chart

Error	Correction - Drill/Test Reference
Lack of squeeze on the recovery phase of the pull.	Tell the swimmer to clap hands together as he/she squeezes the arms together.
Kicking too wide.	Have the swimmer kick with a pull buoy on. If it falls, the knees are too wide.
Knees coming under the stomach.	Have the swimmer kick on his/her back and keep the knees at or below the water surface.
Swimmer does not get hands under the body on the pull.	Have the hands scull outward and then inward until they almost touch under the stomach. The hands now form a triangle.
Swimmer is not pushing hands past hips.	Put adhesive tape on the legs below the suit line, and tell the swimmer to touch the tape.
Swimmer cannot feel the stroke pattern in the water.	Have the swimmer swim only two or three strokes at a time. Review the proper pattern.

Skill Progression - Backstroke

Your Athlete Can:	Never	Sometimes	Often
Swim on back	☐	☐	☐
Perform backstroke correctly for a distance of one pool length	☐	☐	☐
Start on back	☐	☐	☐
Perform backstroke start while facing the starting end; both hands on a starting block	☐	☐	☐
Perform the correct backstroke start and swim one pool length	☐	☐	☐
Turn on back	☐	☐	☐
Perform backstroke turn - assisted	☐	☐	☐
Perform backstroke turn in chest-deep water – independent	☐	☐	☐
Totals			

Backstroke/Back Crawl

The backstroke, also known as the back crawl, is probably the easiest of all competitive strokes to teach and learn, as the swimmer has his/her head out of the water, unlike freestyle, where the face is in the water and breathing and arm coordination must be mastered.

Some learners prefer backstroke because their faces are out of the water and breathing is not an issue. Backstroke and front crawl have similarities. These similarities are useful when beginning swimmers are reminded of a skill or part of a skill which may be familiar to them.

Body Position

Key Points

- Supine, horizontal and streamlined.
- Ears are submerged just below the water surface.
- Head remains still, eyes look upward or slightly down toward toes.
- Chin is tucked in to ensure that the legs are kept in the water.
- Hips are kept close to the surface.
- Shoulders roll along with the stroke.
- To keep the legs in the water, there is a slight slope down from the head to the hips.

Kick

The leg action assists in maintaining a horizontal body position and balancing the arm action. This will minimize the legs swaying from side to side. It may also contribute to some propulsion.

Key Points

- The continuous up and down alternating action is started from the hips.
- Legs are close together.
- Legs are kept almost straight with the knees remaining below the surface.
- Relaxed ankles allow the toes to point.
- Feet break the surface at the end of the upbeat, trying not to splash.

Arm Action

The arm action is continuous and alternating. The arm action provides constant propulsion. Bent-arm action is more efficient than straight-arm action. The straight-arm action may be preferred in the early stages of development.

Key Points - Entry

- The little finger enters the water first, straight arm and close to the shoulder line.

Key Points - Initial Down Sweep

- The arm sweeps downward and outward to the catch. This is assisted by a natural shoulder roll.
- The hand is pitched downward and outward by the palm.

Key Points - Up Sweep

- The hand pitch is changed to sweep inward and upward.
- The arms are bent at a 90-degree angle at the elbow.

Key Points - Final Down Sweep

- The arm pushes through to the thigh.
- Fingers are pointing sideways and palms are downward.

Key Points - Recovery

- The hand comes out thumb first.
- The arm turns gradually to ensure that the little finger is ready for entry.
- Arm remains straight and relaxed throughout.

Key Points - Breathing

- Breathing is natural. As a rule, breathe every stroke cycle.

Key Points - Timing

- Six leg kicks to one stroke cycle.

Backstroke - Faults & Fixes Chart

Error	Correction	Drill/Test Reference
Knees bending too much during kick.	• Encourage swimmer to relax legs and ankles. • Kick from the hips.	1. Practice kick by using board and extending board and arms over knees. 2. Kick short distances. Board will help stop too much knee bend.
Feet and hips are too low in water.	• Check swimmers body position. • Encourage swimmer to push hips up to top of water. • Encourage a continuous kick with the feet making a little splash. • Check swimmer's head position. If head is too high hips will drop.	1. Use of fins will encourage the swimmer to push hips up. 2. Practice kick with and without kickboard. 3. Encourage the swimmer to practice a streamlined kick. 4. Practice kick with head tilted back, eyes to roof.
Swimmer's body rolls in the water.	• Swimmer is over-rotating. • Check for correct hand entry. • Check that swimmer's hands are not crossing over center line of body.	1. Practice specific drills and encourage swimmer to enter water with arms straight. 2. Over-exaggerate hand entry. 3. Ask swimmer to enter shoulder-width or wider.
Too much splash when hands enter the water.	• Check for correct hand entry. • Encourage swimmer to enter water with little finger first.	Practice specific hand entry drill, thumb up/rotation of hand/little finger in.

Skill Progression - Breaststroke

Your Athlete Can:	Never	Sometimes	Often
Swim breaststroke on front	☐	☐	☐
Perform breaststroke with rhythmic breathing for one pool length	☐	☐	☐
Perform two breaststroke turns in a row after swimming one to two pool lengths	☐	☐	☐
Totals			

Breaststroke

The breaststroke is one of the four competitive strokes. It is also a valuable survival stroke. When swimming the breaststroke the swimmer is prone in the water, and the arm and leg actions are symmetrical. The swimmer breathes in at the beginning of each arm stroke.

Breaststroke is the only competitive stroke where the arm recovery is carried out under water and where a greater amount of frontal resistance is experienced. The arm action is an out sweep, down sweep, in sweep and up sweep with recovery in a streamline position.

The leg kick in breaststroke is probably the most difficult of all kicks for swimmers to master and may take some time. The leg action is simultaneous and is sometimes described as a “whip kick.” In addition to the breathing, the correct timing of the arms and legs is very important.

Swimmers are encouraged to develop good streamlining skills when performing the breaststroke, and correct turns and finishes need to be reinforced. The teaching of a “split stroke” at the start and turn phase of the swim is very important.

Breaststroke - Faults & Fixes Chart

Error	Correction	Drill/Test Reference
Timing of breathing/arm stroke incorrect.	• Check the position of the swimmer's arms in the pull. • Generally, breathing timing will be incorrect because the hands/arms are being pulled to hips and not under chest.	1. Using fins, practice correct arm action. 2. Use gentle fly kick when performing this drill.
Timing of breathing incorrect.	Check position of head during recovery.	1. Emphasize importance of placing face in water only to hairline. 2. Do not to get top of head wet.
Body position angled or pulling to one side.	Check that both leg and arm kicks are simultaneous and same amount of pull/kick is being carried out on each side.	1. Practice leg kick with/ without board; introduce specific kick drills. 2. Practice correct arm pull with/without fins.
Body not moving quickly or far enough under water on start/turn. Arms will be apart.	Ensure that swimmer is in a streamlined position.	1. Practice lots of push offs from wall in a streamlined position. 2. Try to get swimmer to see how far he/she can go under water.
Uneven leg kick/or hips higher on one side during swim.	Ensure that both feet are turned out correctly and that leg kick is even and simultaneous.	Practice specific drills to encourage correct leg kick and body position.

Skill Progression - Butterfly

Your Athlete Can:	Never	Sometimes	Often
Swim butterfly on front	☐	☐	☐
Perform butterfly using dolphin kick for 15 meters	☐	☐	☐
Perform butterfly with rhythmic breathing for one pool length	☐	☐	☐
Perform a butterfly turn after swimming butterfly without stopping	☐	☐	☐
Perform two butterfly turns in a row after swimming two pool lengths	☐	☐	☐

Butterfly

The butterfly stroke is generally taught after the swimmer has established basic skills in the other three competitive strokes. The butterfly stroke relies on good timing and simultaneous arm and leg actions. The stroke is best taught by breaking it down into three phases: kick, arm action and breathing.

Butterfly - Faults & Fixes Chart

Error	Correction	Drill/Test Reference
Uneven stroke.	Ensure swimmer's legs and arms are moving simultaneously.	1. Practice fly kick with/ without fins and kickboard; streamlined on surface and below surface. 2. Practice arm action with fins. 3. Practice arm rotations on pool deck.
Breathing too late.	Have swimmer start breathing earlier.	1. Use specific drills. 2. Swimmer breathes every third or fourth stroke.
Kick is low, body not streamlined and weak kick action.	• Encourage swimmer to make a strong second kick. • Encourage swimmer to move whole body, not just the legs.	Swimmer practices whole body movement with fins.
Swimmer doing short, fast strokes with body upright, (i.e., feet and hips too low).	• Swimmer may not be pulling through past legs before recovery phase. • Check for two kicks per arm cycle.	1. Practice kicking fast over short distances with/without fins. 2. Encourage high body position and feet breaking waterline. 3. Practice pulling arms through to side of legs; emphasize touching thumbs to side of legs before arm comes out of water. 4. Practice without breathing for short distances so that breathing is not part of the stroke.

Individual Medley

The individual medley is one of the most challenging of all swimming events. However, it can also be one of the most fun for the swimmer. The swimmer must change strokes throughout the race using the correct turns and tempo for each of the strokes.

Regardless of the distance of the individual medley event, the swimmer must swim the race using the four competitive strokes in the correct order. The athlete swims each stroke for one-fourth of the race. The swimmer begins the race from a standing or in-water start in the order of:

- Butterfly
- Backstroke
- Breaststroke
- Freestyle (any other stroke, generally freestyle).

To train for individual medley events, the coach must teach all four strokes and appropriate turns. To better prepare for a race, focus more attention on the athlete's weakest stroke. During the race, the coach will want to make sure the swimmer concentrates on the weakest stroke, not expending all his/her energy in one particular phase of the race.

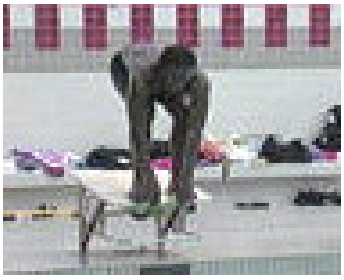
Individual Medley - Faults & Fixes Chart

Error	Correction	Drill/Test Reference
Swimmer begins to swim incorrect stroke after turn.	Practice event during training sessions.	Ask athlete to name the correct order of the strokes.
Swimmer rolls onto stomach (prone) at turn from butterfly to backstroke.	Emphasize that swimmer must be on back after touching wall in butterfly leg of event.	Have swimmer swim into wall, butterfly from flags, touch wall with both hands, and bring both knees up and feet to wall, pushing off wall on back in streamlined position and into backstroke leg of the event.
Swimmer does not touch wall with both hands in butterfly and breaststroke turns.	Emphasize that swimmer must touch wall with both hands on butterfly and breaststroke turn.	Practice swimming into wall, butterfly and breaststroke from the flags, and touch with both hands.

Swimming Starts

There are basically three different ways in which a swimmer may perform a start.

Grab Start



Track Start

In Water Start

Standing starts such as grab or track starts may be performed on the blocks or from the edge of the pool. A swimmer who is unable to do a standing start or is competing in backstroke events will perform a water start.

All starts are signaled by the starter who will whistle the swimmers onto the blocks or into the water. The starter will then command the swimmers to "Take your marks." The swimmers leave the block or end of the pool when the starter signals with a gun or whistle.

Starting is a very important aspect of competitive swimming, and, in major competitions, a one-start rule may be enforced; therefore, it is important that the swimmer is given regular instruction in this skill. Be aware of certain medical conditions which may restrict swimmers from practicing out-of-water starts. Remember, when teaching starts, break down the skill and make it fun.

Safety Notes

According to the Official Special Olympics Sports Rules, prior to beginning instruction in butterfly, the coach reviews each athlete's medical information form and determines whether the athlete has been screened for Atlantoaxial Subluxation. Restrictions from participating in the above events apply until the athlete has been examined, including x-rays of full extension and flexion of the neck, by a physician who has been briefed on the Atlantoaxial Subluxation. Water depth must be a minimum of six-feet deep before teaching the dive start from the deck.

Starting-Block Starts - Freestyle, Breaststroke and Butterfly

Practice the freestyle, butterfly and breaststroke starts while standing on a starting block. Each of the starting methods uses the basic start techniques described below.

- Freestyle Grab Start
- Freestyle Track Start
- Breaststroke Dive Start
- Butterfly Grab Start

Swimming Starts - Faults & Fixes Chart

Error	Correction	Drill/Test Reference
Swimmer slips off block or edge of pool.	Ensure that swimmer's toes are curled over block or edge.	Practice standing on block with toes over block.
Swimmer enters the water on an angle.	Ensure that the swimmer is well balanced and that movement off edge/block is even.	1. Practice jumping forward off the block. 2. Encourage the swimmer to look forward, jumping in feet first.
Swimmer's arms are apart during entry into water.	Ensure a streamlined body position - hands together on entry, arms squeezing against ears/head.	1. Practice entry into water with one hand on top of the other. 2. Preferably the stronger hand underneath as this will be the hand/arm which will pull first.

Swimming Turns

Freestyle Turns - Faults & Fixes Chart

Error	Correction	Drill/Test Reference
Turning too early into the wall.	Swimmer touches wall with one hand before executing a somersault.	Hands on wall, kick hard, then somersault, pushing off wall in a streamlined position.
Pushing off wall with one foot.	Encourage swimmer to push off with both feet.	1. Swimmer performs a vertical somersault, feeling feet pushing off bottom of pool. 2. Swimmer feels feet pushing off edge of pool then moves into a streamlined position.

Teaching Butterfly and Breaststroke Turns

The butterfly and breaststroke turns are very similar. The only difference is that with a breaststroke turn a split stroke is performed under water directly after the turn. A split stroke is 1.5 strokes under water. When reaching the wall at the turn and finish, the swimmer must touch the wall with both hands. The hands may touch above, below or at the waterline. The hands do not have to be at the same height. However, it is vital that the shoulders remain horizontal.

The swimmer will use a leading arm which will move along the body line, and a rotation of the swimmer's body will occur. It is important that the swimmer maintains a streamlined body position. The swimmer's head must break the surface of the water before the arm stroke is performed.

Aquatics Athlete Skills Stroke Development Assessment

Athlete Name _____ **Start Date** _____

Coach Name _____

Instructions

1. Use tool at the beginning of the training/competition season to establish a basis of the athlete's starting skill level.
2. Have the athlete perform the skill several times.
3. If the athlete performs the skill correctly three out of five times, check the box next to the skill to indicate that the skill has been accomplished.
4. Intersperse assessment sessions into your program.
5. Swimmers may accomplish skills in any order. Athletes have accomplished this list when all possible items have been achieved.

Freestyle

- ☐ Makes an attempt to swim on front
- ☐ Performs freestyle in waist-deep water
- ☐ Performs freestyle using flutter kick for 15 meters
- ☐ Performs freestyle with periodic breathing for 15 meters
- ☐ Performs freestyle with rhythmic breathing for one pool length

Freestyle Start

- ☐ Makes an attempt to start from in the pool
- ☐ Performs a proper start in the pool
- ☐ Performs proper start standing on the pool edge
- ☐ Performs proper start using a starting block
- ☐ Continues to swim a proper freestyle stroke after starting from the block

Freestyle Turn

- ☐ Makes an attempt to turn around without stopping
- ☐ Performs an open turn in waist-deep water
- ☐ Performs an open turn, after swimming freestyle, without stopping
- ☐ Performs a flip turn in waist-deep water
- ☐ Performs a flip turn, swimming freestyle for 15 meters
- ☐ Performs two flip turns in a row after swimming two pool lengths

Backstroke

- ☐ Makes an attempt to swim on back
- ☐ Performs backstroke in waist-deep water
- ☐ Performs backstroke for 15 meters
- ☐ Performs backstroke correctly for a distance of one pool length

Backstroke Start

- ☐ Makes an attempt to start on back
- ☐ Performs backstroke start, holding the side of pool with one hand
- ☐ Performs backstroke start while facing the starting end, both hands on a starting block
- ☐ Performs the correct backstroke start and swims one pool length

Backstroke Turn

- ☐ Makes an attempt to turn on back
- ☐ Performs backstroke turn - assisted
- ☐ Performs backstroke turn in chest-deep water – independent
- ☐ Performs backstroke turn and continues to swim for one pool length

Breaststroke

- ☐ Makes an attempt to swim breaststroke on front
- ☐ Performs breaststroke in waist-deep water
- ☐ Performs breaststroke using correct breaststroke kick for 15 meters
- ☐ Performs breaststroke with rhythmic breathing for 15 meters
- ☐ Performs breaststroke with rhythmic breathing for one pool length

Breaststroke Turn

- ☐ Makes an attempt to do a breaststroke turn without stopping
- ☐ Performs breaststroke turn in waist-deep water
- ☐ Performs breaststroke turn after swimming for 15 meters
- ☐ Performs two breaststroke turns in a row after swimming two pool lengths

Butterfly

- ☐ Makes an attempt to swim butterfly on front
- ☐ Performs butterfly in waist-deep water
- ☐ Performs butterfly using dolphin kick for 15 meters
- ☐ Performs butterfly with rhythmic breathing for 15 meters
- ☐ Performs butterfly with rhythmic breathing for one pool length

Butterfly Turn

- ☐ Makes an attempt to do a butterfly turn without stopping
- ☐ Performs butterfly turn in waist-deep water
- ☐ Performs a butterfly turn after swimming butterfly without stopping
- ☐ Performs a butterfly after swimming for 15 meters
- ☐ Performs two butterfly turns in a row after swimming two pool lengths

Sample Squad Training Program

The following training program provides an example plan for Special Olympics aquatics athletes. The program provides coaches with a basic concept of progression of swimming skills. Of course, each coach will want to conduct his/her training program according to his/her athletes' specific needs and ability levels, factoring in the facilities available and time constraints.

The program takes swimmers from an introduction to the water through awareness of the four competitive strokes and individual medley. In many cases, it will take more than eight weeks to achieve this level. If possible, athletes should attempt to participate in a year-round aquatics program to attain higher levels of technical competency and fitness. The following conditions are assumed prior to starting this training program.

1. The plan is based on 60-minute training sessions in the water.
2. The plan is based on the facility being available three or more times per week.
3. The plan assumes that all swimmers can swim 25 meters of freestyle and backstroke without assistance and would have learned all the skills from the "Stroke Development" section.
4. The pool size used in this training example is 25 meters. However, a 50-meter pool can be used.

Adjustments to the entire program may be necessary, depending on the specific team/squad situation. As a coach, if you do not have the pool time available, or your athletes are not at the level of the plan, use this as an example and a goal to work toward. Feel free to take parts of the training plan and use appropriately for your own team/squad, remembering to build up gradually and maintain a high level of responsibility and care for your athletes.

Please Note: There must be a certified lifeguard on the pool deck at all times while athletes are in the pool area. Ensure that all safety precautions are taken and that a high level of duty of care be given to all athletes under your instruction.

Prior to any program being conducted, it would be advisable that you have a very good idea of the levels and ability of the swimmers who will be part of your groups. A suggestion would be to conduct some "tryout" or "assessment" sessions to determine which levels are best suited for your swimmers. By doing this, you will be well prepared to start planning your weekly programs.

- Be aware of your swimmers' ages. Remember that you may have a variety of ages in your groups, so it is important that activities be programmed that are age appropriate.
- If you have more than one group or squad of varying skill levels, it is suggested that you name each group/squad; for example, Level 1 or Level 2, or Squad 1 or Squad 2, or give them a name relating to a well-known swimmer, etc., to distinguish groups.

The sample workouts below refer to three different group/squad levels and will give workouts for each over an eight-week period. These workouts are only an example of the type of programs that can be developed and will vary according to the number and skill level of your swimmers. Whether or not you use the following training program, be consistent in several areas.

Duty of Care

The safety and well being of each athlete needs to be your first priority when developing any Special Olympics aquatics training program. Any potential dangers need to be identified and action taken as soon as possible.

Warm-Up

Warm-up time needs to be programmed into the training session prior to entering the water. Emphasis is on raising the swimmer's heart rate, warming up muscle groups and building basic muscle strength. It is also important that swimmers are taught the correct warm-up drills. Warm-up sessions need to be supervised.

Training Equipment

Swimmers are encouraged to have all required training equipment with them at each training session, e.g., water bottle, fins, paddles, spare pair of goggles and cap.

Session Programming

Training programs developed for different levels and ability groups need to be regularly assessed. Ensure that program goals are achievable. Do not set unrealistic goals.

All relevant information about the training program should be made available to the athlete, family member or care giver. Information, such as the number of training sessions, dates and times, needs to be included.

Stroke Technique

When programming training sessions, strong emphasis should be given to the development of good stroke technique. This can be achieved through setting stroke-specific drills which are practiced at each training session.

Learning through Fun

Athletes learn through fun activities, so include fun activities in your training program that have relevance to the skills you are trying to develop.

Positive Reinforcement

As a coach, it is important that you give positive reinforcement to your athletes. Always try to speak to each athlete individually and be aware of individual personalities and group dynamics.

Goal Setting

Ensure that all goals set are achievable and realistic. Put in place some form of recognition such as “Skill Achievement Awards” or “Skill Progression Awards.”

Setting of Boundaries

Athletes need to know what their boundaries are to help ensure your training program runs smoothly and that each athlete is given 100 percent opportunity to learn. It is important that clear, concise and consistent instruction is given.

Be Prepared - Be Flexible

Once you have set your training program and are confident that it will run smoothly, be prepared to make changes. As a coach, you must be flexible and able to put into place alternative programs for your athletes.

Nutrition

In this section, we will see how the food we eat impacts successful training and competition. Nutrition basically means all the food we eat and the beverages we consume. Food is our body's energy source which gives us our "get up and go." Without it, athletic performance goes down.

Hydration - Keeping Water in the Body

During exercise, the body loses water primarily through sweat, even in cold weather or in water. The body has several mechanisms to protect itself from the negative effects of dehydration, but thirst does not occur until the person is already dehydrated! As small a loss as 4 percent of body weight (4 pounds in a 100 pound person) can seriously affect performance.

The goal is to keep the athlete hydrated and not allow him/her to become dehydrated. The easiest way is to create a simple, routine system that all your athletes follow:

When to Drink Water	How Much Water to Drink
Night before practice or competition	Glass of water (8 ounces/250 milliliters)
Four hours before event	Glass of water (8 ounces/250 milliliters)
15 minutes before event	One-half glass of water (4 ounces/125 milliliters)
During event of less than one hour	One water break
During event of more than one hour	One-half glass every 20 minutes
After event	Glass of water every three hours until next day

Athletes need to be instructed to "drink as much water as they want." However, several serious medical conditions can occur from too much water. If you are practicing in warm environments, you may need to increase the frequency of water breaks. The athlete can hydrate with several types of liquids; however, the best replacement for most events is plain water.

- Water
- Carbohydrate drinks (PowerAde, Gatorade)
- Mixture of one-third fruit juice and two-thirds water is best used when the activity lasts longer than one hour

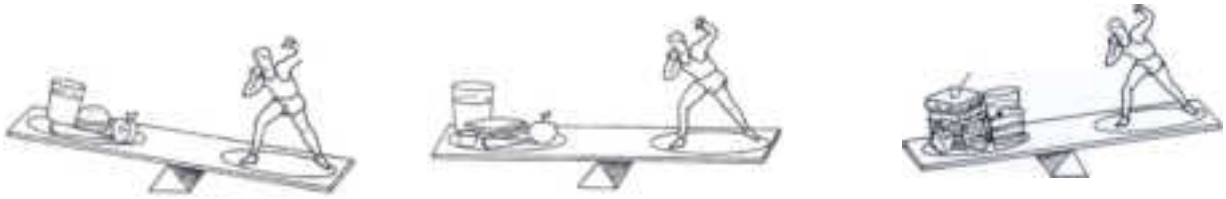
Calories

The energy the body gets is measured in calories. Different foods provide different amounts of energy, therefore varying amounts of calories. The amount of calories a person needs depends on many factors. Our metabolic rate is the speed at which we convert food to energy. This rate can be fast, slow or moderate, depending on the athlete. For example, younger athletes require about 3,000 calories per day. This may decrease for some older athletes that have less stringent training and competition programs. All these factors determine an athlete's diet. If insufficient calories are not consumed, an athlete's performance will be negatively impacted.

Energy Balance

Energy balance is important for successful training and competition.

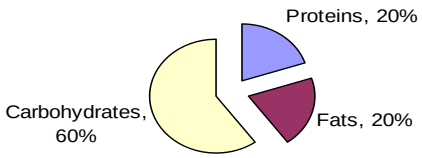
Energy Intake < Energy Output	Energy Intake = Energy Output	Energy Intake > Energy Output



Nutrient Balance

Nutrients have different jobs, though they work together or need the presence of others to work properly. Nutrient balance is like the energy balance. Athletes must take in all the nutrients they require to be healthy and strong in training and competition. A typical high performance diet for an athlete will provide most energy from carbohydrates, with low and almost equal amounts of fat and protein.

Recommended High Performance Diet



Types of Nutrients

Protein—main body-building nutrient

- Constant need for regular intake
- High quality: eggs, milk, fish, meat
- Low quality: nuts, lentils, beans
- Too much protein converts into energy source or stored as body fat

Carbohydrates—our energy food

- Body's major energy source
- Breaks down quickly and easily in digestive system
- Good sources (complex): rice, corn, potatoes, beans, fruits
- Poor sources: white sugar, honey, soft drinks, chocolate bars
- Complex carbohydrates need to be main part of diet

Fats—slow energy food

- Concentrated energy source, twice as much as carbohydrates
- Breaks down very slowly and uses more oxygen to create energy
- Need small amounts for optimal health
- Visible fats: butter, margarine, plant and fish oils, fat on meat
- Invisible fats: milk, cheese, nuts, certain vegetables (vegetable fat is better for us)

Vitamins—most easily consumed through well-balanced diet

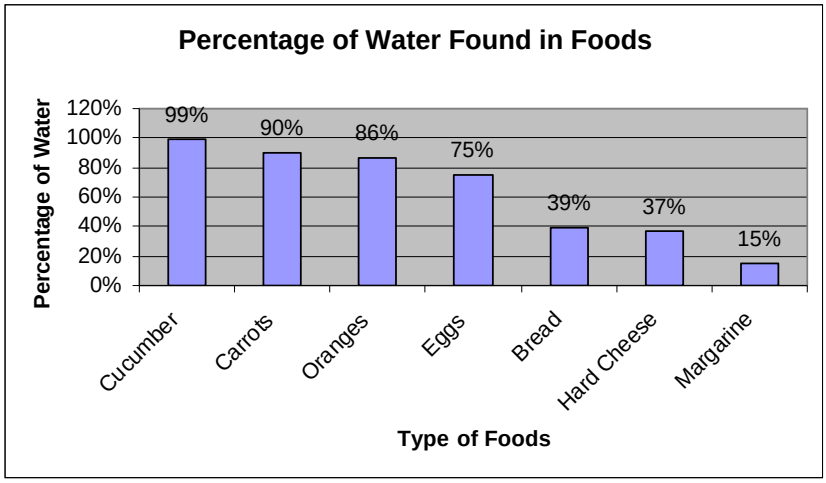
- Need small amounts daily
- Low levels can reduce performance
- Highest proportions in natural, fresh foods
- Fat soluble: stored in body and ready for use
- Water soluble: cannot be stored, must be in daily food intake
- Vitamin C cannot be used without iron

Minerals—most easily consumed through well-balanced diet

- Need small amounts daily
- Essentials: calcium, sodium, potassium, iron, iodine
- Iron is essential for oxygen transport throughout the body
- Iron cannot be used without Vitamin C
- Iodine controls rate that energy is released
- Calcium helps muscles react normally and recover from exercise

Water—required by the body for survival

- Performance is impacted immediately if water needs are not met, especially for aquatics athletes
- The harder you train and exercise, the more water you need
- Drink water often and in small amounts before, during and after competition
- Food contains more water than we think



Fiber—important though often ignored

- Not absorbed by body
- High fibers: natural plant foods
- Good fibers (bran): wheat, oats, brown rice
- Low fibers (processed foods): white flour, white sugar, white rice, white pastas
- Make you feel full without getting fat

An Aquatics Competition

The competition you and your athletes experience will depend on many different factors. The meet may be a small, three- to four-team event for a practice, a regional event or state Games. The more swimmers involved, the more time the meet will take.

Communicate with your teams' volunteers and parents on what to expect.

- How long the event will be.
- What to expect from the athletes.

There may be only certain events offered. Some meets may have electric timing, others may use watches. This information is usually included in the meet information from the hosting team.

The team must arrive at least one hour before the event. The athletes need time to warm up and learn the flow of the meet (i.e., staging for competition and awards). The athletes must be aware of when their events will occur in the schedule.

Teaching the Components of an Aquatics Competition

1. Have a practice meet.
2. Use the whistle and commands.
3. Practice warm-ups.

Coaches Tips for Aquatics Competition – At-A-Glance

Tips for Practice

1. Prior to the event, advise each athlete on what events he/she will compete in.
2. Show a video of a previous meet.
3. Have athletes practice with the people on their relay team.
4. Videotape athletes at practice; have them watch themselves.
5. Obtain swimming instructional videos of strokes, starts and turns.
6. Teach athletes to rehearse each race in their heads, "imagine the event."

Aquatics Glossary

Term	Definition
Aerobic	Pertaining to or presence of oxygen.
Anaerobic	Pertaining to or lack of oxygen
Backstroke	Where the swimmer remains on his/her back from the start or push off from the wall to the turn through to the completion of the race.
Backstroke Start	Swimmer starts in water, both hands hold onto block, both feet under waterline.
Bilateral Breathing	Alternate breathing from right to left sides. In freestyle, breathing every third stroke.
Body	The torso, including shoulders and hips.
Breaststroke	Stroke done completely on the horizontal plane with the swimmer's chest horizontal to the bottom of the pool. From the beginning of the first arm stroke after the start and after each turn, the body shall be kept on the breast. The arm and leg action is simultaneous. The kick takes place below the waterline.
Buoyancy	This is the upward supportive force of water, counteracting the downward force of gravity. The force of buoyancy is determined by the density of the water; the greater the density the greater the buoyancy. Factors which affect a swimmer's buoyancy and floating position are: age, body build and bone size, muscular development and weight distribution, amount of fatty tissue, lung capacity and water density.
Butterfly	Stroke performed completely on the horizontal plane. After the start and after each turn, the swimmer must remain on the breast and is permitted no more than two leg kicks per stroke cycle. Arm action is forward and simultaneous. Leg kick is simultaneous.
Catch	Occurs with hand entry into water. The hand "catches" or "grabs" water.
Center line of body	Imaginary line drawn down the long axis of the body.
Check List	List of skills coach should be looking at within program.
Cool-Down	Performed at end of training session. Helps remove waste products from body.
Coordination	Consistent movement in water. Example: even leg kick in butterfly.
Course	Designated distance over which the competition is conducted. **Long Course**: 50 meters (55 yards to be recorded as 50 meters) **Short Course:** 25 meters or 25 yards
Divisions/Divisioning	Where athletes compete with other athletes of similar ability in equitable divisions. Variance between fastest and slowest time is no more than 10 percent.
Drill	Skill used to develop and maintain stroke technique.
Dual Competition	Competition between two clubs.

Term	Definition
Efficient Stroke Technique	Where the best results are obtained, using the least amount of effort.
Event	Any race or series of races in a given stroke or distance. For competition limits, one event equals one preliminary or one preliminary plus its related final or one timed final.
Fatigue	Short term sensation of tiredness and reduced performance.
Final	Any single race which determines the final places and times in an event.
Finalist	Athletes who swim in a final race.
Finals	Where the final race of each event is competed.
Flutter Kick	Fast freestyle or backstroke kicks.
Freestyle	Stroke other than backstroke, breaststroke or butterfly.
Freestyle Relay	All swimmers swim freestyle stroke.
Frontal Resistance	This is the resistance to forward progress made by the water immediately in front of the swimmer or any part of the body. This resistance is caused by the swimmer's shape in the water.
Grab Start	The swimmer stands on the block/edge, toes curled over edge, hands holding onto block.
Heats	Division of an event in which there are too many swimmers to compete at one time.
Horizontal	Parallel with the surface of the water.
Hypothermia	Occurs when the body's core temperature drops too low.
In-Water Start	Swimmer starts in water, holds onto block with one hand, points the other in the direction of swim and pushes off wall with two feet.
Individual Medley	Event where the athlete swims the prescribed distance and strokes in the following order: butterfly, backstroke, breaststroke, freestyle.
Invitational Competition	Competition in which all competitions and/or teams are invited by the host.
Lane Markings	Guidelines on the bottom of the pool and in the center of the lanes, running from the starting end to the finishing/turning end of the pool.
Lateral	Swimmer is on his/her side.
Length	Extent of the course from one end to the other.
Log Book	Record of swimmer's progress and activity.
Main Set	Main training part of a program. New skills may be introduced, skills revised along with timed set work.
Medley Relay	Four swimmers swim an equal distance in order of backstroke, breaststroke, butterfly and freestyle
Meet	Series of events held in one program.

Term	Definition
Pace Clock	Used by swimmers to check the time taken for each set distance. Counts off rest time before starting again.
Pool	Physical facility in which the competition is conducted.
Pool Deck	Area immediately around pool.
Preliminary	Session of the meet in which heats are held; also called divisioning.
Prone Position	Swimmer lies on front.
Propulsion	This is the force that drives the swimmer forward and is created by the swimmer's arms and legs.
Qualifying Heats	Competition in which there are a number of heats to qualify the fastest swimmers for the finals where final placing for the event will be determined. Can also be called divisioning.
Race	Any single swimming competition; i.e., preliminary, final, timed final.
Relay Leg	Order/position of a swimmer in a relay team event.
Relays	Four swimmers on each team, each to swim one-fourth of the prescribed distance using any desired stroke.
Rotate/Rotation	Moving in one line of the body's axis.
Scissor Kick	Kick performed while on the side.
Seconds Rest	Rest time given between sets.
Simultaneous	Moving at the same time.
Streamline - Streamlining	Body shape in the water which offers the least possible resistance.
Supine	Swimmer lies on back.
Total Distance	Total amount of meters covered in program.
Track Start	Swimmer stands on block/edge, one foot in front with toes over edge, other foot behind, hands holding onto block.
Unified Sports Team	Refers to a proportionate number of athletes and partners.
Warm-Up	Series of exercises/drills used to prepare the body. On-land warm-up can consist of jogging and stretching. In-water warm-ups include slow, easy swims.
Whip Kick	Description of leg action in breaststroke.

Incident Report Instructions

Whenever an Accident Occurs:

An incident report is available from your Program office and must be completed immediately and mailed to the address shown on the form. This holds true whether the person involved is a participant or a spectator, or whether or not you feel the incident will result in a claim.

Although you may not have sufficient information to answer all the questions, it is important that the form be completed as fully as possible. Do not delay sending in the report form; an incomplete form is better than none at all. Always include your name and daytime telephone number where indicated on the form.

The form contains sections to capture information regarding injury to persons and damage to property.

Emergency Response

First-Aid Equipment Checklist:

- List of athletes with special conditions (asthma, diabetes, allergies, etc.)
- List of emergency phone numbers
- Adhesive bandages with gauze pads – assorted sizes
- Antiseptic
- Arm sling (triangular bandage is fine)
- Bandage scissors
- Butterfly closures
- Cotton swabs
- Elastic tape
- White tape
- Elastic wraps
- Emergency blanket
- Latex gloves (multiple pairs)
- Plastic bags and bags for ice packs
- Sterile water
- Resuscitation (CPR) masks/face shield

Corrective Action Needed:

Corrective Action Taken:

Access to Emergency Service:

1. Telephones and the appropriate emergency numbers are accessible
   ☐ Yes ☐ No
2. There is adequate passage for emergency vehicles
   ☐ Yes ☐ No
3. Athletes' medical history forms are on-site
   ☐ Yes ☐ No
4. Athletes' emergency contact lists are on-site
   ☐ Yes ☐ No

Corrective Action Needed:

Corrective Action Taken:

Special Olympics

www.specialolympics.org

e-mail: info@specialolympics.org

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